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Privatizing Infrastructure—Capital Market Pressures and Management Incentives

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One of the arguments for privatizing infrastructure is that private ownership gives the managers of infrastructure firms better incentives to manage well: the new, private sector owners put stronger pressure on management to operate efficiently and profitably, and those who lend money to the firms monitor management more carefully. But privatization does not ineluctably improve management. The devil is in the details. The rules accompanying privatization determine how well new capital market pressures are brought to bear.

This Note examines how owners and lenders encourage managers to run private firms well and proposes some privatization rules for infrastructure companies. While it draws mostly on the experience of the United Kingdom and the United States, two countries in which privately owned infrastructure has an established track record, the lessons are just as relevant to developing countries. In particular, the Note concludes that privatizing governments should:

- Seek, where possible, to have several different firms operating in industries that are local natural monopolies, such as water distribution, so that bankrupt firms can more easily be replaced by others.
- Allow concentrated share ownership, because large shareholders have the best incentives to monitor management.
- Allow foreign ownership and hostile takeovers, to increase new owners' leverage over managers by providing for a wide range of potential subsequent buyers for their firms.
- Regulate privatized firms in ways that don't guarantee owners their profits, so owners have financial incentives to monitor managers.

The problem

In a competitive industry, managers come under pressure from four groups: customers, workers, owners, and lenders (figure 1). Customers want good products at low prices. Workers want competitive salaries. Owners want high profits. Lenders want their loans repaid. And if these groups don't get satisfaction, they can turn to other firms, run by other managers. The combined pressure means that managers must run their firms reasonably well.

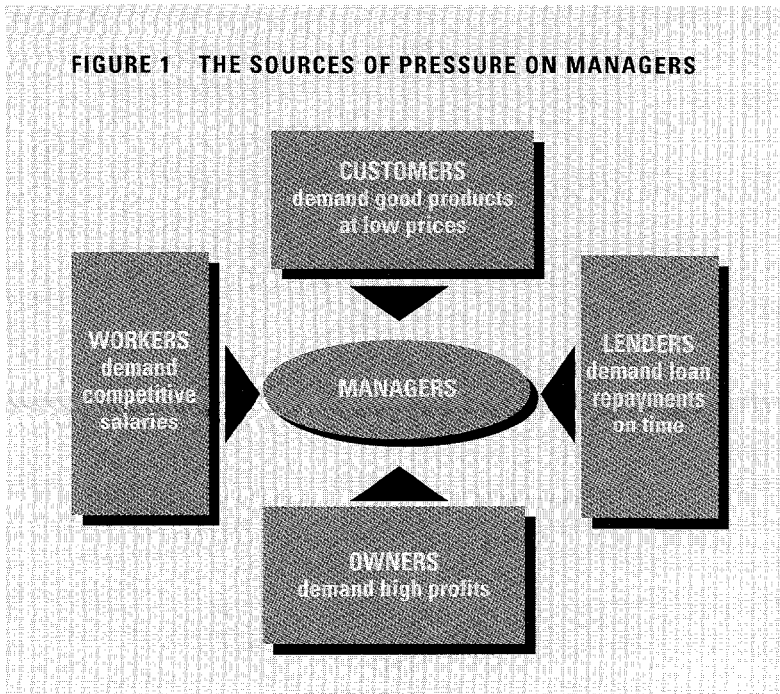
The traditional infrastructure firm, however, has been run as a publicly owned monopoly, radically changing the balance of these forces. Customers exert less pressure, because they cannot choose among sellers, and governments typically don't demand the same financial return on their investments as private owners do. In the absence of pressure from consumers and owners, the demands of employees and lenders do not create good managerial incentives, for the easiest way for managers to satisfy these demands is to sacrifice the interests of customers and owners—rather than increasing their firm's efficiency. A bank's demand for loan repayments, for example, may be met at the expense of customer services or dividends paid to the owner.

The solution has two parts. First, governments should subject infrastructure providers to competition wherever possible, to strengthen customer pressure. And second, they should strengthen lender and owner pressure through privatization. Here we consider the second—the first is the subject of other Notes in this series.





FIGURE 1 THE SOURCES OF PRESSURE ON MANAGERS



Pressure from lenders

Although privatization doesn't always introduce new lenders, it does change the way lenders behave. Without implicit or explicit government guarantees of loan repayments, lenders worry more about a firm's becoming insolvent. Thus, they have more to gain from monitoring the behavior of managers. They'll take more care specifying, in the debt covenants that accompany loans, what the firm can and cannot do (what debt-equity ratio it must keep below, for example). And they'll take more care ensuring that managers comply with the covenants. Further, if the firm defaults on its repayments, the lenders have to consider the possibility of taking control of it themselves, introducing new management, or even selling the assets and closing the business.

But getting the threat of bankruptcy to spur better management is tricky in infrastructure. The first problem is that regulated monopolists tend to be allowed to charge prices high enough to keep them in business. In the United Kingdom, for example, regulators are legally required to ensure that companies can finance their functions. The second problem is that infrastructure firms are monopolies supplying services that consumers cannot easily do without, such as water and electricity. In competitive markets, it may not matter to consumers if

a firm disappears along with its products—they can switch to another brand. But what happens when a water monopoly goes bankrupt? A new firm must somehow take over the assets of the old business without unduly disrupting service. In a country with only one water company, that may be difficult.

Nevertheless, regulated infrastructure firms can go bankrupt—and in the United States, they have. The Public Service Company of New Hampshire, an electric utility, filed for bankruptcy in 1988, and El Paso Electric in January 1992. Both had suffered unexpected increases in the cost of constructing nuclear power plants, and the regulatory authorities declined to allow them to pass on all the cost overruns to consumers in the form of price increases. The New Hampshire utility merged with Northeast Utilities; El Paso was taken over by the Central and South West utility company. Bankruptcy was an option in these cases partly because there were many utilities operating in similar circumstances in the United States, so other firms could take the place of their failed counterparts. (Also important was the fact that U.S. law allows companies to continue to operate while bankrupt.) When privatizing, then, there are advantages in not selling all the local electricity or water monopolies to one buyer. Argentina, to take just one example, followed this approach in privatizing its electricity sector: three private distribution companies now supply electricity in greater Buenos Aires.

Pressure from owners

Private owners put pressure on managers in three ways:

- By monitoring them.
- By linking their pay to their firm's profitability.
- By being willing to sell the firm to new owners.

Monitoring management

The most direct way in which owners look after their interests is by appointing and then monitoring their firm's top managers. In big companies, they usually do this through the

board of directors, which they appoint and which then appoints and monitors the management. But at annual or extraordinary general meetings, the shareholders may review and, if they want, overrule the directors' proposals to, say, pay dividends or make major acquisitions. (The precise powers of shareholders vary according to such things as company law, the founding documents of the company, and the requirements imposed by stock exchanges.)

If a firm is owned by thousands of shareholders, each holding only a tiny proportion of the firm's shares, no shareholder has a strong incentive to do the research and other work that's necessary to monitor and influence managers. For small shareholders unhappy with a firm, it is easier to sell their shares than to take deliberate steps to improve the firm's management. Selling can in itself be helpful—as the discussion of performance pay below suggests—but it is large shareholders who are most likely to put direct pressure on managers. They have an important financial interest in management's performance—and the resources and voting power to influence management. Privatizations that permit concentrated ownership therefore tend to be good for efficiency.

In the United Kingdom, utility firms were privatized under a rule that, initially, no one shareholder could own more than 15 percent of a firm, to shelter management from takeover bids while it "adjusted to privatization." This rule has probably weakened the incentives for managers to improve their firm's performance. In electricity, the rule is in force until the year 2000—although it has been possible for a majority of shareholders to overturn the rule since 1995. In water, it applied only until the end of 1994. Since then, two water companies have been taken over, one by a subsidiary of a French water company, the other by a British electricity company. More takeovers are being discussed. The interest in takeovers shows that market participants believe they can increase efficiency now that they are permitted to own controlling interests in the firms. Any efficiency improvements they do make will benefit shareholders and, over time, consumers.

Linking pay to performance

Besides directly monitoring management, shareholders, through the board of directors, can give managers performance-based pay packages. Consumers are sometimes angered by large bonuses paid to the managers of infrastructure firms, but well-designed performance pay can strengthen managers' incentives to increase their firm's efficiency—not only increasing shareholder returns but in the long run giving consumers lower prices or better quality.

Privatization, of course, is not a prerequisite for performance-related bonuses. The managers of publicly owned infrastructure companies can receive bonuses linked to, say, operating profits. But privatization permits a new type of bonus because it allows managers' pay to be linked to their firm's share price. As long as the firm's shares are traded frequently, the link is useful because the share price will reflect better than any other indicator the firm's value—which is what owners want managers to focus on. Basing a manager's bonus solely on profit in the current year could, for example, encourage the manager to sacrifice the firm's value for the sake of short-term profits. Share-price-based schemes can circumvent this problem, because well-informed shareholders will be on the lookout for managerial decisions that jeopardize future profitability.

The simplest share price scheme gives managers shares in their firm. If they manage well and increase the firm's expected profitability, their wealth increases. The incentives can be further sharpened by giving the managers options rather than shares. Suppose, for example, that a firm's shares are trading at \$10. The owners could give the managers the right to purchase shares in the company in three years at a price of, say, \$12 a share. If the share price is lower than \$12 in three years, these options are worth nothing: there's no point in buying shares at \$12 when they can be bought for less on the stock market. But if the share price exceeds \$12, the options are valuable.

There are many variations on the options approach. British Gas, for example, introduced a



more complex scheme, partly in response to public criticism that management pay was high and not clearly linked to performance. Under this scheme, British Gas awards its managers bonuses in the form of long-term share options. The market value of the options—at the time they are created—is between 33 percent and 125 percent of the managers' base pay. But the managers do not immediately receive the options; instead, the company holds the options for three years. At the end of the three-year period, the increase in the share price for British Gas is compared with those for the 100 biggest listed companies in the United Kingdom, and the managers are given a proportion of the options based on British Gas's ranking among these 100 companies. This ranking, or "benchmarking," helps to separate the effect of the managers' performance from other influences on the share price, such as the strength of the British economy.

Selling the shares

Another action owners can take to look after their interests is to sell their shares to someone else. When owners jointly sell a controlling interest in a firm to another group against the wishes of managers, the sale is called a hostile takeover. The incentive effect on managers is encapsulated in the term *hostile*: the incumbent managers feel hostile because the takeover can result in their being fired. If managers are doing their job poorly and the current owners cannot remedy the problem, the sagging share price provides an opportunity for other groups to buy the firm, fire the management, change the firm's strategy, and improve its profitability and thus its share price. If managers are doing their job well, the firm's assets should not be undervalued and no such opportunities should arise. The chance of a takeover bid arousing the hostility of management is smaller. Thus, owners' ability to sell their shares is one source of pressure on managers.

Governments can therefore help new private owners to improve the efficiency of their firms by not putting restrictions on who can subse-

quently buy the firm. In particular, they can ensure that they haven't placed any obstacles in the way of hostile takeovers or foreign ownership. Note, however, that takeovers are not always desirable, especially when they are friendly rather than hostile. If one firm buys out another so that the two no longer compete with each other, this takeover (or merger) reduces the intensity of customer pressure. In these cases, governments need to weigh the advantages of permitting takeovers against the benefits of competition.

Regulation

Regulation affects private investors' interest in pressuring their managers to manage well. In particular, the more that regulation determines a firm's profit, the less need owners have to supervise, cajole, and threaten managers. Regulation should therefore let firms benefit from good management decisions and suffer the consequences of bad ones. Pure rate-of-return regulation sets the price a firm can charge and increases or decreases that price so as to keep the firm's rate of return constant. If the regulator's price reviews are too frequent (for example, every year), rate-of-return regulation takes the risk out of the business and weakens the incentives of managers. At worst, when private owners receive guaranteed profits, they may do no more to encourage efficiency than public owners. Indeed, studies of water and electricity utilities in the United States, where rate-of-return regulation is used, have often found private companies to be no more efficient than their public counterparts. The solution is to rely on competition, not regulation, wherever possible. Where competition isn't possible, the rate reviews in rate-of-return regulation can be made less frequent or price cap regulation can be introduced instead.

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